

REMARKS

Applicants kindly appreciate the opportunity to conduct a personal interview with Examiner Nguyen on April 18, 2007. During the interview, Applicants' representative described the claimed invention, and addressed the drawing objections and rejections under 35 USC 112 and 102(b). As a result of the interview, the Examiner recommended amending the specification to replace "ridges" with "diagonal ridge lines," which correspond to the diagonal ridge lines depicted in FIGS. 1 and 2. Also, the Examiner recommended amending claims 6-9 to recite that "at least one diagonal ridge line" is inclined at a predetermined angle to a rotation axis of the die roller. Finally, to overcome the prior art rejection, the Examiner recommended amending independent claims 17 and 24 to add language similar to claims 6-9 regarding "at least one diagonal ridge line." All of the above amendments are incorporated herein.

Claims 6-9 and 17-29 are pending in the application. Independent claims 6-9, 17, and 24 have been amended by the present amendment. The amendments are fully supported by the application as originally filed.

In the Office Action of 01/19/2007, the drawings were objected to allegedly for not showing "a cylindrical die roller..." as recited in claims 6-9.

Claims 6-9 also were rejected under 35 USC 112, first paragraph for "failing to comply with the written description requirement. In particular, the following language of claim 6 was noted:

a cylindrical die roller having a matrix formed on a surface thereof in which a plurality of rows of concave portions or convex portions that are configured by quadrangular pyramids having square bottom faces and linearly continuous are regularly arranged so as to be adjacently formed in parallel with one another and being defined such that each of the square bottom faces has at least one diagonal inclined at a predetermined angle of between about 10 degrees and 40 degrees with respect to a

direction of a rotation axis of the die roller (underlining added on page 4, 2nd paragraph of the Office Action of 01/19/2007).

Further, the Examiner cited paragraph 0080, which appears on page 20, last two lines to page 21, line 12 of the specification). The rejection under 35 USC 112, first paragraph and drawing objection are addressed together.

In response, the paragraph on page 20, last two lines to page 21, line 12 of the specification has been amended, and claims 6-9 have been amended to replace "at least one diagonal" with "at least one diagonal ridge line," for example, as depicted in FIGS. 1 and 2 of the application.

Further, the amended claim language is supported at least by the specification on page 22, last paragraph to page 23, first paragraph; page 21, lines 13-21; page 23, lines 13-21; page 24, lines 11-20; page 25, second paragraph; page 27, lines 14-16; and FIGS. 2, 5, and 8.

In particular, FIG. 2 is a plan view of a die film 1 according to the invention. FIGS. 5 and 8 are different views of a die roller 105. The die film 1 of FIG. 2 is produced according to a method in which the die roller 105 is rotated on one surface of a photosensitive resin 103, which transfers a rough face 5 of the die roller 105 to the photosensitive resin 103; thereafter, the photosensitive resin 103 is exposed to light and hardened "thereby producing the die film 1 in which the photosensitive resin 103 having the rough face 5 is stacked on the one face of the base film 102" (specification at page 22, last paragraph to page 23, first paragraph; and page 21, lines 13-21).

Referring to FIGS. 5 and 8, as described on page 23, lines 13-21 of the specification, a matrix 28 of the rough face 5 is formed on the cylindrical surface of the die roller 105. In particular, a cutting tool 21 is placed above the die roller 105, as shown in FIG. 5, in an inclined state such that a major diagonal line 25 "forms a predetermined angle θ with respect to the direction of the rotation axis 23 of the die roller 105. The predetermined angle θ of this

inclination is equal to the angle θ formed by the diagonal ridge lines 4 of the convex portions 3 of the above-mentioned die film 1 and an edge 7 of the film-like resin base material 2" (page 24, lines 11-20).

Thus, a plurality of concave portions 24 are formed on the die roller 105 (see specification at page 26, lines 5-13). Each concave portion 24 is "configured by a quadrangular pyramid having a square bottom face" (see specification at page 27, lines 14-16).

In summary, the figures clearly show, and the specification adequately describes, a cylindrical die roller 105 (as shown in FIG. 5) having the matrix 28 (as shown in FIG. 8) of pyramidal concave portions (see, e.g., page 25, second paragraph). Regarding the emphasized language ("each of the square bottom faces has at least one diagonal inclined at a predetermined angle of between about 10 degrees and 40 degrees with respect to a rotation axis of the die roller"), claims 6-9 have been amended to replace "diagonal" with "diagonal ridge line." Moreover, as stated above, the predetermined angle θ of inclination of the major diagonal line 25 with the rotation axis 23 "is equal to the angle θ formed by the diagonal ridge lines 4 of the convex portions 3 of the above-mentioned die film 1" (page 24, lines 11-20). Referring to page 21, lines 9-11, the predetermined angle θ can be 10-80 degrees, or 10-40 degrees.

In other words, the angle θ formed by the diagonal line 25 with the rotation axis 23 on the die roller 105 is equal to the angle θ formed by diagonal ridge lines of the convex portions 3 on the die film, where this angle θ can be about 10-40 degrees, where the rough face 5 of the die roller 105 is transferred to the die film 1 according to the method described above.

It is believed that the above explanation overcomes both the drawing objection and the rejection under 35 USC 112, first paragraph.

On page 5 of the Office Action of 01/19/2007, regarding claims 22 and 29, the Examiner indicated that the following language is not present in the specification: "the concave or convex portions on the surface of the die roller configured as a hemisphere." However, the specification

on page 36, lines 16-19 clearly describes "hemispherical convex portions." Therefore, it is believed that the rejection of claims 22 and 29 is overcome.

Claims 6-9 and 17-23 were rejected under 35 USC 112, second paragraph as being indefinite. In particular, the Examiner alleged that the die film 1 is not an optical film, but instead the die film 1 is used to make the optical film 140 as shown in FIGS. 9-10. In response, page 33, lines 22-23 of the specification state: "the die film 1 may be used as an optical film." Therefore, it is believed that the rejection of claims 6-9 and 17-23 is overcome.

Claims 17-21 and 23-28 were rejected under 35 USC 102(b) as being anticipated by Japanese Publication 11-147255 to "Michiharu". This rejection is respectfully traversed.

As recited in independent claims 17 and 24, as amended, the concave or convex portions are arranged in linear rows, where "the concave portions or convex portions each include a face having at least one diagonal line inclined at a predetermined angle with respect to a direction of a rotation axis of the die roller," and the concave portions or convex portions form linear rows "extending in a direction which forms the predetermined angle with respect to a side of the cylindrical die roller."

In FIG. 9(b) of Michiharu, a plurality of linear rows of pyramid structures are shown, but the rows are parallel to sides of the die roller.

In FIGS. 1 and 3 of Michiharu, even if the pattern roller 1 is considered to have a plurality of rows, these rows are parallel to sides of the pattern roller 1.

For at least the reasons discussed above, the Michiharu reference does not anticipate or otherwise render obvious the Applicants' claimed invention.

It is believed that the claims are in condition for immediate allowance, which action is earnestly solicited.

Respectfully submitted,

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Date: May 18, 2007

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